Lepr Rev (1999) **70,** 110–123

News and Notes

Romania: 'Ceausescu's old clothes go to the last leper colony'

The *Guardian* newspaper (UK) of Thursday November 1998 reported that in a final act of post-communist restitution, Europe's last leper colony is to receive the finest clothes once worn by Romania's former dictator, Nicolae Ceausescu, and his wife, Elena.

They will be sent to Tichilesti Hospital in Isaccea, a centre for leprosy patients which, for more than 40 years of communism, was officially considered non-existent. Isaccea is still not sign-posted. Access is by a winding dirt track off the main road. Contact with the outside world remains an alien concept for most of its 34 leprosy patients, aged between 30 and 90. The article reports that the allocation of clothes will include crocodile skin bags, mink furs and gold-thread bathrobes, part of a collection of thousands of objects from the Ceausescu estate, filling 1000 square metres and now up for disposal.

Change at last at WHO

The following appeared in the *British Medical Journal*, 1998, 317, 1 August, page 295:

Dr Gro Harlem Brundtland has done what most people hoped she would. On her inauguration as director general of the World Health Organisation, she has swept away the existing secretariat (though keeping some members on as advisers), and announced her own carefully chosen cabinet to an increasingly optimistic staff. Of the 10 new appointments, eight come from outside the organisation and six are women. There is an even split between the north and south, and all of the WHO's six regions are represented. Along with the new cast come plans for a new way of working—reducing overlap and increasing convergence between individual programmes.

The speed of the appointments has taken the organisation by surprise, and one appointment in particular is causing concern. Michael Sholtz, who is to be responsible for health technology, will be in charge of the action programme on essential drugs, the WHO's key initiative to provide poorer countries with appropriate and affordable drugs. Dr Sholtz comes from the pharmaceutical industry and has little experience of the developing world. Dr Brundtland has portrayed the appointment as providing a liaison between the industry and the WHO. Dr Sholtz will have to prove his allegiance at a tough time for world health, when the development of effective but expensive drugs for AIDS has brought to a head the north-south fight over drug patent rights.

So far the changes all relate to the WHO's headquarters in Geneva, where Dr Brundtland has executive powers to hire and fire. The more difficult and perhaps more crucial test of her ability will be in dealing with the WHO's six regions, over which she has no direct control. Regional directors are elected by their constituent countries rather than appointed by the director general, and they can hire and fire staff within their regions. Especially important is their responsibility for appointing country representatives—the WHO's front liners, who, because of lack of training and resources, form one of the weakest links in the WHO's chain of influence.

The regions have always presented the WHO's leaders with a problem. But Dr Brundtland must take them on after 10 years of unchecked autonomy and at a time of strong support from their constituent

countries. Regional meetings have become an important forum, especially for developing countries—many of whom feel that their voice at the World Health Assembly has been eroded by northern dominance and by decline in the assembly's influence.

Dr Brundtland clearly understands the need to woo the regional directors, three of whom were her rivals for the director general's post. A retreat is planned for the end of the month, which all six regional directors will attend. This seems designed to set the tone for the annual round of regional meetings in September and October and to establish a process for streamlining the currently diverse regional structures and methods of working. The fate of the country representatives is also likely to be on the agenda: Dr Brundtland is understood to want to meet them in person and to strengthen their ties with headquarters. Meanwhile, money is to be made available to install proper communications between the regional offices and headquarters. This will allow frequent video conferences so that regional directors will become actively involved in policy making. In Dr Brundtland's phrase, there will be one WHO speaking with one voice. If she can achieve this politically difficult internal alliance, the WHO may again at last become an effective advocate for world health.

WHO Press Release, November 1998, 'Asia is 'epicentre' of World's tuberculosis emergency'

Press Release WHO/87 of 23 November 1998 reads as follows:

HIV, multidrug-resistant TB and financial crisis increase TB threat to the region

Bangkok – Asia is the epicentre of the world's TB emergency and must become a top priority among international efforts to control the disease, according to Dr Gro Harlem Brundtland, Director-General of the World Health Organization.

In a statement today (23 November) at the Global Congress on Lung Health, 29th World Conference of The International Union against Tuberculosis and Lung Disease (IUATLD), Dr Brundtland warned that unless there is concerted action in Asia, the epidemic will continue to rise, jeopardizing global control efforts.

'Our ability to control the spread of TB pivots on Asia – now the epicentre of the world's TB epidemic,' said Dr Brundtland. 'If we cannot control TB in Asia we will never stop TB globally. Factors such as HIV, multidrug-resistant TB and the financial crisis converging in this region are increasing the complexity of the epidemic, making it far more difficult to contain.'

Six high-burden countries which account for over 50 percent of the TB epidemic are in Asia. According to WHO estimates, 4·5 million of the eight million new cases that occur each year are in India, China, Bangladesh, Pakistan, Indonesia and the Philippines.

'We are at a crossroads in TB control,' said Dr Brundtland. 'We can allow the global TB epidemic to become more deadly and strengthen its grip on the world. Or we can act now to reduce the suffering and deaths. We can and must strike back with the tools that we have.'

Dr Brundtland issued her statement at a meeting attended by 1500 delegates from around 90 countries. The Global Congress on Lung Health was organized by the Anti-Tuberculosis Association of Thailand (ATAT) in collaboration with the Ministry of Public Health and the Thoracic Society of Thailand, and sponsored by IUATLD. This is the largest meeting of lung disease experts to be held in Asia in a decade.

'We cannot afford to lose the battle against this age-old killer,' said Professor Don Enarson, Director of Scientific Activities of IUATLD. 'We can cure TB. But we not only need political commitment at national level, but also internationally. We face a major political challenge.'

WHO is concerned that the problem will be compounded by three factors: multidrug resistant TB (MDR-TB), HIV and the economic crisis. Surveys in selected sites in Asia show high levels of MDR-TB that cannot be treated with the most powerful anti-TB drugs. Experts predict an increase in the number

of TB cases as a result of HIV. HIV weakens immune systems, increasing TB transmission to both HIV-positive and HIV-negative people. By the end of the century, HIV will cause three quarters of a million new TB cases globally that would otherwise not have occurred.

WHO is also concerned that a decline in the standard of living in the region could increase the spread of communicable diseases such as TB, and in a climate of changing health sector priorities, some disease programmes lose critical funding.

The 1998 WHO report on the TB epidemic, *TB: A Crossroads*, released at the meeting, documents the consequences of inaction in countries that are not investing in effective TB control. One of the biggest problems is that high-burden countries are not implementing effective control. This includes failure to invest in good quality TB drugs.

The report also describes the progress made by thousands of people around the world who are using the DOTS strategy to stop TB. DOTS is recommended by WHO and IUATLD as the most effective and affordable way to detect and cure infectious TB patients. The strategy not only involves direct observation of treatment. It also requires political commitment, microscopy services, reliable drug supply and monitoring of patient progress toward cure.

Over one hundred countries are now using DOTS. In the last three years, one million TB patients have been treated with DOTS. In some areas where DOTS has been introduced, death rates have been reduced fivefold to less than five percent. Cure rates in half of China where DOTS is being used are 95 percent.

'Three years ago, TB was made a priority here in Thailand,' said Dr Songkram Supcharoen, Chairman of the Organizing Committee of the Global Congress and President of IUATLD. 'In the last year, coverage increased fourfold. The government has committed to a five-year plan to ensure that every patient in Thailand has access to DOTS.'

Dr Brundtland invited participation in a new 'Stop TB' initiative to catalyse a global coalition of partners from all sectors of society, led by WHO, to address the problem of TB in Asia and the rest of the world, and to encourage the use of DOTS more widely.

The Stop TB initiative will develop a global action plan for TB control which identifies the role of different partners. The initiative will focus on a global charter to secure commitments to improve TB control from Heads of State of endemic countries, international organizations including from the UN family, and donors. It will develop mechanisms to ensure global access to quality, fixed dose combination TB drugs.

Urgent action focussed on high burden countries, the emerging MDR-TB problem and management of TB control in settings of high HIV prevalence is also planned. The initiative will support a balanced agenda for global TB research focusing on short- and long-term results.

'By elevating TB control to a political level, there is so much more that we can do,' said Dr Brundtland. 'I urge you to take the right course, support the new initiative and join us to use DOTS more widely and stop TB.'

For more information, please contact Gregory Hartl, WHO, Geneva on +41 22 791 4458, Becky Owens, WHO, Geneva on +41 22 791 2630 (cellphone +41 22 79 217 3403/+41 22 79 213 4314), Patrick Bertrand, IUATLD, Paris on +33 1 44 32 0442 (cellphone +33 6 85424387), or Wattana Manaviboon, Ogilvy PR, Bangkok on +662 632 8300.

Top-level meeting at White House on tuberculosis

The following is from a WHO Press Release WHO/79 of 28 October 1998:

Soros, Wolfensohn and Brundtland meet with Hillary Clinton; Urgent action needed to prevent drug resistant tuberculosis strains

Washington – At the invitation of First Lady Hillary Rodham Clinton, Secretary of Health Donna E.

Shalala, the Administrator of the US Agency for International Development (USAID), Brian Atwood, World Health Organization (WHO) Director-General Dr Gro Harlem Brundtland, World Bank President James D. Wolfensohn and financier George Soros met with her at the White House this afternoon to discuss possible new initiatives to fight tuberculosis (TB) and prevent the emergence of drug-resistant strains.

It is hoped that such initiatives would mobilize millions of dollars in new funds to accelerate international TB control efforts, the majority of which would go directly to fighting TB in high-burden countries. More international attention to the TB problem is needed if solutions to challenges facing TB control efforts are to be developed. One major challenge is to ensure that effective anti-TB drugs are available everywhere in the world. The DOTS (directly observed treatment, short-course) strategy is recommended by WHO to accomplish this (see background note for full explanation of DOTS). It is also important that new tools be developed to help in the eventual elimination of TB.

Currently, TB is the single biggest infectious killer of youth and adults, causing between 2 to 3 million deaths each year. Increasingly, TB is appearing in forms resistant to multiple drugs (MDR-TB) that cannot be cured by once-effective medicines.

In October 1997, WHO warned of the emergence of multidrug-resistant 'hot zones' around the world, where TB could become incurable for anyone who does not have access to the most sophisticated and expensive healthcare. MDR-TB raises treatment costs 100-fold – up to US $250,000 per patient in industrialized countries – and greatly reduces the chances of survival.

A three-pronged strategy will be used to stop drug-resistance. First, to help countries expand their use of DOTS, thereby ensuring that powerful anti-TB drugs are taken properly. This has been shown to prevent the emergence of MDR-TB in Korea, Algeria, Chile, Tanzania and New York City. Second, to increase research into implementing an enhanced version of DOTS, known as 'DOTS Plus', that can treat existing drug-resistant cases. And third, to develop a long term vision for TB research that can develop new tools to one day completely eliminate the threat of TB.

Without increased funding for and political commitment to the fight against TB, WHO estimates that over 200 million people alive today will become ill with the disease.

For further information, journalists can contact Gregory Hartl, Health Communications and Public Relations, WHO, Geneva. Telephone (41 22) 791 4458. Fax (41 22) 791 4858. Email: hartlg@who.ch

Tropical Medicine Resource: The Wellcome Trust, London, UK

The following appeared in *TDR News*, *57*, October 1998:

The association between TDR and the Wellcome Trust is an ongoing relationship of cooperation and collaborations: a fruitful partnership.

The Wellcome Trust has had a long history of involvement in tropical medicine, driven by the active interest of its founding father Sir Henry Wellcome. Sir Henry's experiences in the tropics strongly influenced his pharmaceutical company and his philanthropic activities—the establishment of the Wellcome Laboratories in the Sudan being a prominent example. Since his death in 1936, the Wellcome Trust has actively supported tropical medicine research—with overseas units in Kenya, Thailand and Vietnam. Today those units play a critical role in enabling high quality clinical and epidemiological field research of practical medical importance and in providing training for local scientists.

The main focus of the Wellcome Trust is in funding biomedical research—it is currently spending some US$ 350 million on research every year. As a not-for-profit charity, free of any commercial imperatives and independent of government, the Trust can pursue its philanthropic objectives from a balanced rational long-term perspective, but always informed by the guiding principle that it should support 'scientific research which may conduce to the improvement of the physical conditions of mankind'.

In common with many organizations working within the sphere of tropical medicine, the Trust has

taken an active interest over the past year in the growing problem of malaria and its control. In association with TDR, the Trust has been closely involved in the global collaborative effort to address the resurgent problem of malaria in Africa—the 'Multilateral Initiative on Malaria'. A series of high-profile meetings have taken place—the first being held in Dakar, Senegal—to identify priority research areas and to address the issue of strengthening research capability in Africa. The Trust was pleased to be able to host the London-based meeting of the group in October of last year.

The aim of the initiative is to promote increased interaction and coordination between the range of agencies involved in malaria research or control. It is hoped that tighter coordination will help to prevent duplication of effort and will optimize the investment of resources in priority areas. A further aim is to ensure that effective mechanisms are in place for research findings to be applied. Communication, cooperation and dissemination of information and training strategies are key to the success of any initiative of this type.

An important aspect of the Trust's involvement in Tropical Medicine is within the world of education and training. The Tropical Medicine Resource is a department of the Trust specializing in the creation of training materials aimed at healthcare professionals, whether they be medical students, lecturers, fully qualified practitioners on on-the-ground field staff. This development of training materials is one area where the close links between Wellcome and TDR become immediately apparent.

The largest asset of the Tropical Medicine Resource is a huge archive of visual material—mainly photographs—amounting to some 45,000 images and covering many aspects of tropical medicine. These images are in the process of being catalogued and digitally stored, so that they can be accessed by the outside world—particularly the academic, research and scientific publishing communities. It is of course essential that the images are accompanied by a properly researched, scientifically rigorous and informative description—a job which is done by an in-house team of medically literate writers and editors.

Earlier this year the Tropical Medicine Resource launched four CD-ROM based training products in the series Topics in International Health. The disks contain tutorials, a supporting photographic image collection and an electronic glossary of terms; and cover the following—malaria, trachoma, sexually transmitted diseases and sickle cell disease. Four more disks are planned for later in the year—leprosy, tuberculosis, schistosomiasis and diarrhoeal diseases. The series is intended for use within both the developed and developing world, where the installation base of computers, equipped with CD-drives is growing steadily.

The disks are a testament to the effectiveness of the cooperation and informal partnerships that exist within tropical medicine training and research communities. Written by a team of in-house medical writers, the tutorial contents of the disks are carefully planned by subject experts working in collaboration with the writers. In this aspect the Trust has worked closely with TDR and CTD staff and is indebted to TDR for the many illustrations that they have been able to provide for this purpose. Photographs, graphics and animations are selected to best illustrate the tutorials' content. Readers of the June 1998 issue of TDR News may recall that, as a result of this collaboration, 15 people awarded MIM grants in February have all been sent a complimentary copy of the Topics in International Health Malaria disk.

Future projects covering all aspects of diseases of the poor will involve even closer collaboration, with the Wellcome Trust and TDR working together to provide effective and timely training materials and health information linked to WHO eradication and control initiatives. In so doing, we will be supporting the mission of both organizations—that of helping to improve standards of world health.

Author: Chris Coyer, Tropical Medicine Resource, The Wellcome Trust, 210 Euston Road, London NW1 2BE, United Kingdom. Tel 0171-611-8888. Fax 0171-611-8545. E-mail: publishing@wellcome.ac.uk

Human genome project to complete ahead of schedule

The following appeared in the *British Medical Journal*, *317*, 26 September 1998:

The human genome project is all set to present the fully sequenced human genome in 2003, two years

earlier than expected. A draft version of the genome which should contain up to 90% of the total genetic information, is expected to be ready by 2001.

The human genome project is an international collaboration of research, and the intention of the project is to map out the entire genetic blueprint (genome) of the human being. The benefit of sequencing the entire human genome is that it will give scientists a complete molecular understanding of human beings, and the genetic basis from which humans have evolved, in addition to helping scientists understand what happens when something goes wrong or when diseases interfere with normal functioning. It will also provide pharmaceutical companies with new therapeutic targets.

The draft version of the genome will contain relatively raw information. It should hopefully contain, however, the genes that are generally considered most important to biologists and scientists in a fully sequenced and therefore useful form.

The collaboration involves Britain (which is doing about one third of the work), the United States (which is doing about two thirds of the work), and France, Japan, and Germany (which are making small contributions). In Britain, the bulk of the DNA sequencing is being carried out at the Sanger Centre in Cambridgeshire. In the United States, the main centres are the University of Washington, the Whitehead Institute at Harvard University (Cambridge, MA), the University of Houston, and the University of Oklahoma. Funding in Britain comes from the Wellcome Trust and the Medical Research Council. In the United States, most of the funding is from the National Institutes of Health, which set up the National Human Genome Research Institute in Bethesda in Maryland, and the Department of Energy. Work in both continents began in 1990, but sequencing began in earnest in 1992.

The project's overall planning and direction has been an evolutionary process, with the division of labour being discussed and allocated at a series of international meetings. For example, sequencing work on some genes is going on in both Britain and the United States, whereas others are being sequenced only by one centre. It is possible to identify which laboratory is working on a particular gene by looking at the human genome index, a web based tool set up by the National Center for Bioinformatics. Each participating centre has agreed not to take a stand on intellectual property.

Each day short sections of DNA (which are a minimum of 2000 nucleotides long) are sequenced. These short sections are then pieced together into larger fragments. Once the accuracy of these larger fragments is confirmed, they are released into public databases. To date, about 6% of the human genome has been completely sequenced and assembled, with 12% more of it available in rough draft form.

Apart from the basic sequencing of the genome, and the plan to study human genetic variation and human susceptibility to disease, the project is also sequencing the genomes of other important organisms. These include the mouse, yeast, the fruitfly, the Japanese puffer fish, and the roundworm (due to be completed by the end of 1998).

The mouse is of particular interest because of its genetic similarity to humans. By identifying in the mouse the genes that are important for the regulation of other genes, it will be possible to go back to the human genome and identify sections of DNA that are likely to have a similar role in humans.

A further part of the project is designed to study the ethical, legal, and social implications of genome research (this will include the linking of genetic information with personal identity, race, and religion). The database will also be useful for those involved in developing new biological technology. Such developments will include looking for ways to compare the genomes of a large number of individuals to identify disease susceptibility and contraindications to drugs.

The project is now expected to be completed two years ahead of schedule because of advances made during the past few years with the technology used to sequence DNA and because the costs of running this sort of technology have come down.

Earlier this year Dr Craig Ventner, one of the scientists who had been participating in the human genome project, announced that he was breaking away from the project but would be pursuing the same goals from his own Maryland based company (23 May, p. 1558). Dr Ventner said that he could sequence the human genome much more rapidly and at lower cost than the federal project. Fears that this

announcement would lead to US funding being withdrawn from the human genome project seem to be unfounded.

WHO Global Buruli Ulcer Initiative

The following is taken from a poster produced (1998) by this Initiative:

10 Facts about Buruli Ulcer

1 Caused by *Mycobacterium ulcerans*.
2 Although the true burden is unknown, it is considered the third most common mycobacterial infection of immunocompetent humans after tuberculosis and leprosy.
3 Mode(s) of transmission not entirely known.
4 Most patients are children who live in rural areas near rivers or wetlands.
5 Starts as painless swelling in the skin.
6 Often destroys massive areas of skin and sometimes bone, causing deformities and disabilities.
7 Most commonly afflicts extremities of the body.
8 Current treatment is surgical excision requiring long hospitalizations.
9 HIV infection is not a known risk factor.
10 Early detection and treatment prevent complications.

Recognizing Buruli ulcer as an emerging public health threat, the World Health Organization has established the Global Buruli Ulcer Initiative to coordinate control and research efforts world-wide.

A Buruli Ulcer Task Force was established in 1998 to guide the organization's work related to the disease. Through technical support to endemic countries, the initiative seeks to:

- assess local health services and resources currently available for the diagnosis and treatment of Buruli ulcer in endemic areas;
- strengthen the capacity of health systems in endemic areas by upgrading surgical facilities and improving laboratories;
- strengthen surveillance systems in collaboration with other disease control programmes such as those dealing with tuberculosis, leprosy and Guinea worm to increase early detection and referral for treatment;
- improve health education and staff training in communities most affected;
- stimulate essential research on toxin and vaccine development, drug development, rapid diagnostic methods, environmental changes that favor the emergence of the disease, and the global burden of the disease.

Because of the difficulty in accessing health services in endemic areas, patients often seek treatment late in their illness, and complications are frequent and severe. Consequently, hospitalization is prolonged and the treatment per case consumes more resources relative to other diseases. With an increasing number of cases and the associated complications, the long-term socioeconomic impact of Buruli ulcer on rural economies could be substantial. Furthermore, the disease could seriously undermine the efficient use of scarce health resources in endemic countries.

Advocacy is a critical component of the initiative because little attention has been paid to Buruli ulcer in the past. WHO seeks to develop partnerships with NGOs to assist endemic countries and mobilize the resources necessary to help end the suffering associated with this disease.

For more information on the initiative, contact Dr Kingsley Asiedu, WHO Global TB Programme, CH-1211 Geneva 27, Switzerland. Phone (41 22) 791 2803. Fax (41 22) 791 4199. E-mail: Asieduk@who.ch.

See also: Report—International Conference on Buruli Ulcer. Control & Research. Yamoussoukro, Côte d'Ivoire, 6–8 July 1998. WHO/TB/98.252.

New HIV strain may be resistant to drugs

The following is taken from the *British Medical Journal 317*, 11 July 1998, page 100:

The best available antiretroviral drugs, including protease inhibitors, may lose their potency against HIV because new strains of the virus resistant to the strongest drugs have already emerged.

A team of AIDS researchers has reported a case in which a person has become infected with a strain of HIV that is resistant to six of the 11 approved antiretroviral drugs for HIV, including protease inhibitors. Protease inhibitors have been approved for two years; used as part of triple combination therapies, they have contributed to a dramatic decline in death rates from AIDS. Protease inhibitors work by blocking the construction of proteins considered pivotal to replication of the virus.

Transmission of drug resistant HIV strains has been reported previously, but only to antiretrovirals known as reverse transcriptase inhibitors, which work by blocking replication of the virus. These have been used for 10 years but are considered to be less effective than protease inhibitors. This is the first time a strain resistant to protease inhibitors has emerged. The team of researchers that made the discovery announced its findings at the 12th world AIDS conference in Geneva last week. Research results will also be published shortly in the *New England Journal of Medicine.*

The subject of the case study was a middle aged, homosexual man who reported that the only risk encounter he had had in the six months before he was found to be infected with HIV was receptive anal intercourse without a condom. He said that his partner had withdrawn before ejaculation, a behaviour that many homosexual men have considered to be a low risk practice.

Dr Frederick Hecht, head author of the study, said that he is concerned that there may be a tendency toward complacency because of the success of available treatments. 'But the fact that this transmission occurred by a practice that many consider to be safe highlights the crucial role of continued prevention efforts,' he said. In this case, evaluation of the partner's virus showed many of the same mutations, while other genetic tests showed that the virus in the patient closely matched that of his partner.

This case of resistance 'shows that we can do more harm than good if we don't help patients take their medications correctly,' said Margaret Chesney, professor of medicine at the University of California in San Francisco and a coinvestigator in the study. Dr Chesney said: 'The bottom line is that helping patients stick to these difficult regimens is as important as the drugs themselves.'

In a separate study presented at the world AIDS conference, researchers found that many people among San Francisco's HIV positive urban poor population did not adhere to the strict drug regimens prescribed for them, and only 8% were receiving protease inhibitors. The research project, called the REACH (Research in Access to Care in the Homeless) study, was started following concerns that urban poor populations may develop resistant strains of HIV as a result of poor compliance with their treatment. The researchers found that average adherence was 80% by pill count, with adherence being highly correlated to viral load. Small amounts of missed drugs translated into large effects on the amount of virus in the patient's blood.

Carriage rates and fetomaternal transmission in infections due to hepatitis B & C

The following commentary appeared in the *British Medical Journal 317* of 15 August 1998, page 440:

Hepatitis C virus was identified in 1989 in the United States. Parenteral and sexual transmission is responsible for most hepatitis C infection worldwide. There is a difference in carriage rate between hepatitis B and C. For example, over 80% of people infected with hepatitis C virus become chronic carriers compared with up to 20% of those infected with hepatitis B virus.

One possible explanation for this difference between the two viruses is that hepatitis C evades the immune system more easily than hepatitis B because it mutates more rapidly. This theory is supported by the observation that one person may be infected by several subtypes of hepatitis C simultaneously. Vaccine development will prove difficult for the same reason.

Fetomaternal transmission of the two viruses also differs. In mothers infected with hepatitis B virus the vertical transmission rate may be over 90%. The immaturity of the neonatal immune system at least partly accounts for this inability to mount an immune response sufficient to clear the virus. With hepatitis C virus, however, which has recently been shown to be present in the uterine muscle as well as in blood, vertical transmission is only about 6% (but higher if the mother is HIV positive).

Information famine hits Kenya's healthcare

The following is from the latest issue of *INASP Newsletter*. No 11, November 1998 (INASP, PO Box 2564, London W5 1ZD, United Kingdom):

Kenyans have been told that their country's health providers could be employing obsolete treatment procedures due to lack of current medical journals. AMREF's director general, Dr Erik Nordberg, said doctors and other medical personnel relied on old notes acquired from their basic training, as they had no money to procure current literature. Speaking at an international conference organised by the *East Africa Medical Journal*, he said health workers could not provide quality services if they were inadequately informed.

He presented the findings of a study of clinical officers, nursing officers and public health officers in Makueni district, who were using information gained from basic training over ten years ago and lacked current information on drugs and technology. Dr Nordberg said the situation was aggravated by lack of libraries in hospitals and health centres. Ways had to be found to make books and journals available at affordable prices.

EAMJ Editor, Professor Bill Lore, lamented that plagiarism was mushrooming, and that many doctors were reluctant to write for journals. Dr Khama Rogo, chairman of the Kenya medical association said many doctors were also reluctant to read! He urged that doctors in remote parts of the country be provided with pagers and mobile phones and be connected to the Internet.

Professor Peter Odhiambo, former Dean at the University of Nairobi Faculty of Medicine, agreed the University medical library was poorly stocked due to the high cost of books. Students, he said, could not afford to buy books or subscribe to journals. Paul Chuke, WHO country representative, told the conference that medical developments in healthcare 'render most of the information we acquired in medical schools elementary'.

The author, Ogeke Araka, is a freelance journalist in Kenya. A short version of his report has appeared in Africa Health*, FSG MediMedia Ltd, Vine House, Fair Green, Reach, Cambridge CB5 0JD, UK.*

WHO: Essential Drugs Monitor

The Essential Drugs Monitor is produced and distributed by the WHO Action Programme on Essential Drugs. It is published in English, French, Spanish and Russian, and has a global readership of some 200,000 to whom it is free of charge. The Monitor carries news of developments in national drug policies, therapeutic guidelines, current pharmaceutical issues, educational strategies and operational research.

WHO's Action Programme on Essential Drugs was established in 1981 to provide operational support to countries in the development of national drug policies and to work towards the national use of drugs. The Programme seeks to ensure that all people, wherever they may be, are able to obtain the drugs they need at the lowest possible price; that these drugs are safe and effective; and that they are prescribed and used rationally.

All correspondence should be addressed to: The Editor, Essential Drugs Monitor, World Health Organization, CH-1211 Geneva 27, Switzerland. Fax: +41 22 791 4167. E-mail: DAPMAIL@WHO.CH

INASP-Health, Oxford, UK

INASP-Health is a co-operative network created by health information providers, for health information providers (HIPs). Its goal is to facilitate co-operation across the health information community towards universal access to reliable information for healthcare workers in developing and transitional countries.

The network currently involves more than 500 participants, North and South, representing non-governmental organizations, international agencies, library services, publishers (print and electronic), and others. Visit our web-site at http://www.oneworld.org/inasp/ for further information about our range of services and activities.

We welcome all those who are willing to share their experience and expertise with others to improve access to reliable information. Participation is free of charge and without obligation. Please write to:

Dr Neil Pakenham-Walsh, Programme Manager, INASP-Health, INASP, 27 Park End Street, Oxford OX1 1HU, UK.

Leprosy patients sue Japanese government

Thirteen former leprosy patients in Japan are suing the government on the grounds that the country's isolation policy violated their constitutional right to happiness. As reported in a recent issue of *The Lancet*, the former residents in leprosaria also accuse the government of negligence in failing to rehabilitate them promptly after the discovery of an effective treatment. Under a fierce quarantine policy established in 1907, people with leprosy were forced to live in remote leprosaria; men who wished to marry had to have vasectomies and pregnant women were forced to have abortions. Many countries had comparable policies but this situation lasted longer in Japan than elsewhere, and there was no real reform until 1996. A former health minister then formally apologized for the prolonged existence of outdated regulations which, he said, 'wounded the dignity of the victims and their families and caused them great suffering.' But the authorities sidestepped any mention of legal responsibility, according to *The Lancet*. The 13 who have started a lawsuit claim that it will be impossible to dispel the social prejudice against former patients as long as the government maintains an ambiguous legal position on whether its policies were mistaken.

Source: LepNews, Vol 7, No 2, October 1998, Action Programme for the Elimination of Leprosy, CH-1211, Geneva 27, Switzerland.

FDA in USA approves new anti-tuberculosis drug

The *British Medical Journal, 317*, 4 July, 1998, page 11 reported as follows:

The US Food and Drug Administration has approved rifapentine (Priftin)—the first new antituberculosis drug to be licensed in 25 years.

Rifapentine is indicated for pulmonary tuberculosis but must be used in conjunction with other antituberculosis drugs. It is expected to increase patient compliance because it has a shorter treatment course than conventional drugs.

Current treatment regimens for active pulmonary tuberculosis require a minimum of 6–9 months of treatment with at least three drugs, which usually include isoniazid, rifampicin, and pyrazinamide. Treatment can last over a year in recalcitrant cases. Because the regimen is complicated and lengthy, patient compliance is problematic and treatment errors are common. These factors contribute to the emergence of multidrug resistant strains of tuberculosis.

Like rifampicin, rifapentine is given twice a week for two months in the intensive first phase of treatment when daily isoniazid, pyrazinamide, and ethambutol are also required. However, in the next four months of treatment, one dose of rifapentine once a week is sufficient, as opposed to a twice weekly dose of rifampicin. Although this regimen still seems complicated, it is expected to increase compliance and reduce costs associated with directly observed treatment.

Clinical studies on rifapentine in which the drug was substituted for rifampicin in combination therapy showed that the drug was associated with a higher relapse rate than standard treatment, with 10% of patients taking the rifapentine combination relapsing, compared with 5% taking rifampicin. However, this higher relapse rate is expected to be offset by greater compliance.

The United States is the first country to approve rifapentine, but the largest market for the drug is likely to be in developing countries—however they may be unable to afford it.

Bees for development

Bees for Development promotes sustainable beekeeping practices world-wide and serves as a unique, international resource for beekeeping development.

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Bees for Development:

- Supports beekeepers in developing countries
- Promotes sustainable simple beekeeping
- Publishes the award-winning journal *Beekeeping & Development*
- Organises training courses
- Plans, designs, implements and evaluates projects
- Gives expert advice

Bees for Development is an independent, not-for-profit organisation founded in 1993 by Dr Nicola Bradbear and Ms Helen Jackson.

For more information contact: *Bees for Development, Troy, Monmouth NP5 4AB, United Kingdom. Tel: +44 16007 13648, Fax: +44 16007 16167, E-mail: busy@planbee.org.uk, WWW:http://www.planbee.org.uk*

Badgers in the UK 'guilty by suspicion' of spreading bovine TB to cows

'From deliberate culling to accidental death on the road, humans have had a major impact on the badger population. Farmers, for example, convinced that badgers spread tuberculosis (TB) to cattle, demanded their slaughter. An outcry from animal conservation groups followed and, in 1992, laws protecting badgers were introduced. Since then, the badger population in the UK has made a remarkable recovery. Unfortunately, TB in cattle has also increased. Over the last ten years, the incidence of TB has risen steeply in south-west England and the disease is now spreading north into Hereford and south Wales.

Eliminating bovine TB is not only in the farmer's interest—human health can also benefit. Before the 1930s, 10 per cent of human TB came from cows. Since then, pasteurization of milk and the compulsory slaughter of all infected cattle has limited the spread of the disease.

Although badgers are a wild-life reservoir of TB, there is no hard evidence linking them with outbreaks in cattle. The relationship is circumstantial. 'In the areas where cows are infected, if you test the local animals, you find a high incidence in badgers' says Douglas Young of Imperial College School of Medicine. And, in areas where badgers were removed, the number of outbreaks did go

down. 'Though it does seem likely that badgers are the problem, this is not conclusive proof,' he adds.

Last autumn, a panel led by zoologist John Krebs outlined an experiment that will, once and for all, determine whether badgers spread TB to cows (though since the work could take five years to complete, the committee also recommended investment in new research to develop vaccination strategies for control of bovine TB). The plan is to take 10 km square 'hot spots', where the frequency of TB in cattle is high, and implement three different strategies: no intervention, culling all badgers, and removing badgers only after an outbreak of TB in cattle. The effects of such strategies on the spread of TB should determine whether badgers are guilty as charged or innocent bystanders.'

Source: Wellcome News Issue 15, Q2, 1998. The Wellcome Trust, 210 Euston Road, London NW1 2BE.

Private doctors in India prescribe wrong tuberculosis drugs

The following, by Ganapati Mudur, New Delhi, appeared in the *British Medical Journal*, *317*, 3 October 1998, page 904:

Many private doctors in India are violating tuberculosis guidelines by giving their patients wrong combinations and inappropriate doses, a study has found. This may be a factor contributing to the rise of multidrug resistant tuberculosis in India.

The Indian health ministry's tuberculosis control programme detects 1·5 million new cases a year, but tuberculosis still kills around 1200 people each day. The study, conducted by a government tuberculosis centre in Maharashtra state, found 71 faulty prescriptions among a set of 100 issued by doctors possessing a postgraduate degree in medicine (*Indian Journal of Tuberculosis* 1998;45:141–3). It found that 60% of prescriptions for rifampicin and 90% of the prescriptions for ethambutol were faulty.

'This is a surefire recipe for drug resistance,' said Dr Mukund Uplekar, a research consultant with the non-governmental Foundation for Research in Community Health in Bombay, which had previously found 90 different combinations among 113 prescriptions by private doctors. 'Many doctors are just not aware that prescribing a single drug in tuberculosis is like a criminal act,' Dr Uplekar said.

'The sample sizes of prescription surveys are small, but the larger picture is even worse,' said Dr Mira Shiva, head of policy at the Voluntary Health Association of India. Thousands of patients across rural India also first approach doctors in practising traditional medicine and even bogus doctors.

The government's tuberculosis control programme is aimed at expanding the World Health Organisation's recommended 'directly observed treatment short course' (DOTS) strategy to cover most of India. But this is expected to take several years. Government officials concede that about half of the patients are exposed to 'several regimens, varying in duration of treatment and levels of efficacy.'

An unpublished study by the Tuberculosis Research Centre in Madras has also sparked concerns about the quality of drugs. The early 1990s study examined fixed dose combination drugs—pills containing fixed doses of two or more antituberculosis drugs—and found that the bioavailability of rifampicin in some samples was unsatisfactory. Fixed dose combinations are intended to lead to better compliance by reducing the number of pills that patients have to swallow.

Tripartite alliance against tropical disease: Wellcome Trust, London, UK

Infectious disease—still the world's major killer—is the target of a new $25 million joint initiative

launched by the Wellcome Trust and the Burroughs Wellcome Fund, an independent US charity. The initiative aims to strengthen the research capacity in the developing world, to provide local researchers with the expertise to understand and tackle the infectious diseases that so blight life in the tropics.

Following a meeting held at the Cho Quan Hospital in Ho Chi Minh City, Vietnam, in May 1998, it was decided that the centre of gravity should rest in the developing countries, which bear the major burden of infectious disease. Hence, the award programme is of a tripartite nature—a partnership between researchers in a tropical developing country, the UK, and the USA or Canada. Though a principal investigator in any of these locations may lead an application, the project must include strong collaborative links with the other two areas.

The research programmes will focus on bacterial, viral and parasitic diseases. Research on malaria and HIV, though of paramount global importance, will not be funded as other international programmes are already supporting substantial work on these diseases. The emphasis is on projects seeking to put research into practice, and those addressing practical problems. The scope of the initiative is wide-ranging, encompassing basic studies of disease, studies in public health, epidemiology, diagnostics, therapeutics and vaccine development. The programme's goal is to strengthen the existing research base of developing countries, through collaborations with Western laboratories and by promoting scientific training for local researchers.

Applications forms and a more detailed outline of the scheme can be found on the Wellcome Trust Web site (www.wellcome.ac.uk), or by contacting Seam Hussain at the Wellcome Trust (E-mail: s.hussain@wellcome.ac.uk) or Dr Victoria McGovern at the Burroughs Wellcome Fund (E-mail: vmcgovern@bwfund.org).

WHO: Drugs Used in Skin Diseases. Model Prescribing Information, 1997

Curable or controllable skin diseases remain common in many rural communities in developing countries, and they have serious health, social and economic consequences. The publication provides model prescribing information for essential drugs used in their treatment, with details of dosage, uses, contraindications, precautions and adverse effects. It includes details of the drugs used to treat parasitic, fungal, bacterial and viral infections of the skin, bites and stings, pigmentary disorders, malignant melanoma and dermatoses among others. Conditions common in children, acne vulgaris, cutaneous reactions to drugs and urticaria are also covered. The diseases included are mostly very common, and prevalent in developing countries, although some rare, life-threatening disorders such as pemphigus are discussed briefly. The emphasis is on giving the basic information necessary to treat skin diseases in the community safely, effectively and at the lowest possible cost. Preventive measures, such as improvements in hygiene, nutrition, housing and sanitation, are also discussed.

The book is part of a series of WHO publications which provide up-to-date and independent clinical information on essential drugs. The information is intended as source material for adaptation by national authorities, particularly in developing countries, that wish to produce drug formularies, data sheets and teaching materials.

Available in English (French and Spanish in preparation), from: World Health Organization, Distribution and Sales, 1211 Geneva 27, Switzerland. Price: Sw.fr.35/US$31.50, and in developing countries Sw.fr.24.50.

Dr Minoo Mehta International Prize 1998

The 1998 awardee of the Dr Minoo Mehta International Prize is Mr Yog Raj Paudel from International Nepal Fellowship – Green Pastures Hospital in Pokhara, Nepal. Mr Yog Raj Paudel, aged 39, is married with three children. In 1979 he started to work at the Green Pastures Hospital in Pokhara.

He started first his career as an office assistant and became assistant administrator in 1985. From 1990 on he was acting administrator and from 1991 on administrative officer of the Leprosy Control Project, Dang in Nepal which is run by the International Nepal Fellowship with the financial and technical support of the German Leprosy Relief Association.

The Dr Minoo Mehta International Prize is named after the late son of Dr and Mrs Dr Jal Mehta, Poona, India. The Prize is allocated as an annual stipend. This is done in appreciation of the leprosy work performed by Dr Jal Mehta and of the mutual cooperation lasting for years as well as in recognition of the support given by Dr Mehta to leprosy relief work in India. The Dr Minoo Mehta International Prize was not allocated in 1997.

Comparative leprosy vaccine trial in South India

This report provides results from a double blind randomized prophylactic leprosy vaccine trial conducted in South India. Four vaccines, viz., BCG, BCG + killed *M. leprae*, *M. w* and ICRC were studied in this vaccine trial in comparison with a normal saline placebo. From about 300,000 people, 216,000 were found eligible for vaccination and among them, 171,400 volunteered to participate in the study. Intake for the study was completed in 2½ years from January 1991. There was not a single serious case of toxicity or side effects subsequent to vaccination for which decoding was required. All the vaccine candidates were safe for human use. Decoding has been performed subsequent to the completion of the second resurvey in December 1998. Results for vaccine efficacy are based on examination of more than 70% of the original 'vaccinated' cohort population, in both the first and the second resurveys. It was possible to assess protective efficacy of the candidate vaccines against all forms of leprosy together. Observed incidence rates were not sufficiently high to answer the question of protective efficacy of vaccines against progressive and serious forms. ICRC provided 65.5% protection (CI 48.0–77.0), BCG + killed *M. leprae* provided 64.0% protection (CI 50.4–73.9), *M.w* gave 25.7% protection (CI 1.9–43.8) and BCG gave 34.1% protection (CI 13.5–49.8). Protection observed with ICRC and the combination vaccine BCG + killed *M. leprae* meets the requirement for public health utility and these vaccines deserve further consideration for their ultimate applicability in leprosy prevention.

This article has been published in the *Indian Journal of Leprosy*, **70**, 1998.

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